

# 2002 City of College Station Drinking Water Quality Report

May 2003

## Safe Drinking Water... A Top Priority

Our goal at College Station Utilities is to provide safe, reliable drinking water for our customers. We are committed to providing you with accurate information and superior customer service.

The information in this fourth annual Water Quality Report provides a “snapshot” of the quality of College Station’s drinking water in 2002. It describes the source of your water, what is in your water, and how it compares to Federal and Texas standards.

College Station’s water is tested for over 100 different substances, yet only 9 regulated substances were detected in the most recent tests, all well below Safe Drinking Water Act Maximum Contaminant Levels. Substances that were tested for, but not detected, are not included in this report.



Construction began on the Park Place Elevated Storage Tank in December 2001. The tank was placed into service in 2003.

## College Station Utilities: Superior Public Water System

College Station water system has been designated a Superior Public Water System by the Texas Commission on Environmental Quality (TCEQ, formerly the TNRCC). “Superior” is the highest rating that the State of Texas can give to a public water system. College Station attained this rating by a commitment to providing safe, high quality drinking water to our customers, and by performing better than the minimum State and Federal standards for drinking water.

We are proud to report that your tap water continued to meet all Environmental Protection Agency (EPA) and Texas Commission on Environmental Quality (TCEQ) drinking water health standards in 2002.

**EN ESPAÑOL:** Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (979) 764-3433.

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# Your Drinking Water Meets all Federal and State Standards

## CONTACT US

Website:

Online bill payment and account information:

<http://epay.ci.college-station.tx.us>

Line breaks / sewer or water quality problems

**979-764-3638**

Billing questions

**979-764-3535 or 1-800-849-6623**

Water / Wastewater Division

**979-764-3660**

Plant Tours, Speakers, Water Conservation

Information: **979-764-6223**

## VISIT US

Utility Customer Service

(Bill payment and account information)

310 Krenek Tap Road

College Station, TX 77840

Monday - Friday 8:00 am to 5:00 pm

Utility Service Center

(Administrative offices)

P.O. Box 9960

1601 Graham Road

College Station 77842

Monday - Friday 8:00 am to 5:00 pm

## CITY COUNCIL MEETINGS

College Station Utilities is part of the City of College Station municipal government. We encourage you to become more involved in decisions that affect your drinking water! To participate in decisions affecting your drinking water, attend a City Council meeting on the 2nd and 4th Thursday of the month. For meeting agendas and times, call (979) 764-3541 or visit:

<http://www.ci.college-station.tx.us/>



**"We Are a Leading Utility  
Providing High Quality,  
Customer-Owned Services to  
College Station"**

We are committed to:

**Improving The Quality Of Life  
Exceptional System Reliability  
Outstanding Customer Satisfaction  
Best Value For The Price  
Anticipating The Future**

## Where Can I Learn More?

If you have questions about anything contained in this report, or want to schedule a tour of our facilities, please contact:

**Jennifer Douglass Nations  
Water Resource Coordinator  
(979) 764-6223**

[jnations@ci.college-station.tx.us](mailto:jnations@ci.college-station.tx.us)

Additional copies of this report are available at the Utility Service Center and Utility Customer Service buildings (see left) and on our website:

<http://pud.ci.college-station.tx.us>

## Where Does Our Water Come From?

The City of College Station obtains its drinking water from deep wells located in the Simsboro Sand formation of the Carizzo-Wilcox Aquifer. College Station also maintains water system interconnections with the City of Bryan and Texas A&M University, both of which also obtain their drinking water from the Simsboro Sand formation.

After being pumped from the ground, the water is routed through cooling towers at the Sandy Point Pump Station where its temperature is lowered from about 118° Fahrenheit to about 85° F.

Cooled water leaves the Sandy Point Pump Station through 13 miles of transmission line to the Dowling Road Pump Station. Here, we add chlorine to the water for disinfection, and fluoride for dental health.

College Station's water system features 13 million gallons of storage capacity. Ground storage tanks store water for peak demand periods and elevated storage tanks maintain water pressure throughout the city as well as provide water storage for peak demand periods and fire fighting.

On average, each person in College Station uses **over 52,000 gallons of water a year!** Any-one thirsty?

## Special Notice for the Elderly, Infants, Cancer Patients, People with HIV/AIDS or other Immune System Problems

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or Immuno-compromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are

undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by

*Cryptosporidium* are available from the:

**Safe Drinking Water Hotline  
(1-800-426-4791)**

<http://www.epa.gov/safewater>

# WATER QUALITY TEST RESULTS—REGULATED SUBSTANCES

The tables in this report list only the contaminants detected in College Station's drinking water from August 1, 2001 through Dec. 31, 2002, to ensure compliance with the Safe Drinking Water Act. Substances that were tested for, but not detected, are not included in this report. Independent laboratories certified by the EPA and State of Texas perform all testing as required. All substances detected are below the Maximum Contaminant Level (MCL) and do not exceed the health-based standards for drinking water. The EPA has established health-based standards that limit the maximum concentration of a contaminant in drinking water. The presence of a contaminant in your drinking water does not necessarily pose a health risk.

Substance	Maximum Contaminant Level	Detected Levels			MCL Goal	Possible Sources of Substances
Inorganic Contaminants		Minimum	Maximum	Average		
Copper	1.3 ppm	0.002 ppm	0.002 ppm	0.002 ppm	1.3 ppm	Corrosion of household plumbing systems; Leaching of wood preservatives; Erosion of natural deposits
Fluoride	4 ppm	0.3 ppm	0.3 ppm	0.3 ppm	2 ppm	Erosion of natural deposits; Water additive to promote strong teeth
Nitrate	10 ppm	0.1 ppm	0.1 ppm	0.1 ppm	10 ppm	Runoff from fertilizer deposits; Leaching from septic tanks, sewage; Erosion of natural deposits
<b>Microbiological Contaminants</b>						
Total Coliform Bacteria*	Presence in over 5% of monthly samples	0%	1.19%	0.4%	0	Naturally present in the environment
<b>Disinfection and Disinfection By-products</b>						
Chlorine	4 ppm	1.11	2.21	1.87	N/A	Added to drinking water for disinfection
Total Trihalomethanes	80 ppb	8.5 ppb	29.3 ppb	18.9 ppb	N/A	By-product of drinking water chlorination
<b>Radioactivity</b>						
Radium-228	5 pCi/L	1.4 pCi/L	1.4 pCi/L	1.4 pCi/L	0	Erosion of natural deposits

\* In 2002 a total of 972 routine drinking water samples were collected to be tested for Total Coliform bacteria. Of this total, 4 samples tested positive for Total Coliform bacteria. College Station did not violate the MCL for Total Coliform Bacteria.

## LEAD AND COPPER MONITORING RESULTS

Substance	Year Sampled	90th Percentile Values	Sites Exceeding Action Level	Maximum Contaminant Level	MCL Goal	Possible Sources of Substances
<b>Regulated at the Customer's Tap</b>						
Lead	2001	1.7 ppb	1	Action Level = 15 ppb	0 ppb	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	2001	0.134 ppm	0	Action Level = 1.3 ppm	1.3 ppm	Corrosion of household plumbing systems; Erosion of natural deposits

The State of Texas requires the City of College Station to monitor for lead and copper once every three years. The information in the table above is based on 30 samples collected in August 2001. As indicated above, one sample site exceeded the action level for lead and no sample sites exceeded the action level for copper. The 90th percentile values for lead and copper are well below the action level.

## Definitions of Terms

**Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Nephelometric Turbidity Units (NTU):** A measure of turbidity.

**ppb:** parts per billion or micrograms per liter (µg/L). One part per billion equates to 1 second in 31.7 years.

**ppm:** parts per million or milligrams per liter (mg/L). One part per million is equivalent to 1 second in 0.0317 years.

**pH:** The pH scale extends from 0, very acidic, to 14, very alkaline or basic, with 7 corresponding to exact neutral. Most natural waters fall within the range of 4 to 9.

**picoCuries per Liter (pCi/L):** Unit of measurement for radioactive substances.

**Secondary Maximum Contaminant Level (SMCL):** The level of a contaminant that represents reasonable goals for drinking water quality. SMCLs pertain to contaminants that primarily affect the aesthetic qualities relating to drinking water.

**Turbidity:** A measure of the cloudiness of water.

## Your Water System "At a Glance"

### Other Substances

The table below lists amounts of other substances for which College Station's water is tested. The Secondary Maximum Contaminant Levels (SMCL) are not enforced, but rather are intended as guidelines. These items primarily affect aesthetic qualities relating to drinking water. **All substances listed in the following table were tested for in 2002.**

Substance	Detected Levels	SMCL
Alkalinity (Bicarbonate)	366 ppm	No Recommendation
Alkalinity (Carbonate)	11 ppm	No Recommendation
Alkalinity (Phenolphthalein)	5 ppm	No Recommendation
Alkalinity (Total)	377 ppm	No Recommendation
Aluminum	0.008 ppm	0.2 ppm
Calcium	2.96 ppm	No Recommendation
Chloride	56.8 ppm	300 ppm
Dissolved Solids	541 ppm	1,000 ppm
Fluoride	0.36 ppm	2.0 ppm
Magnesium	0.65 ppm	No Recommendation
Manganese	0.009 ppm	0.05 ppm
pH	8.46	8.5
Sodium	200 ppm	No Recommendation
Specific Conductance	891 $\mu$ mhos/cm	No Recommendation
Sulfate	6.78 ppm	300 ppm
Total Hardness	8.14 ppm	No Recommendation
Turbidity	0.05-1.36 NTU	Not Regulated



**Tip!** Grains per gallon (gpg) is a measure of the hardness of water. 1 gpg is equivalent to 17.1 ppm.

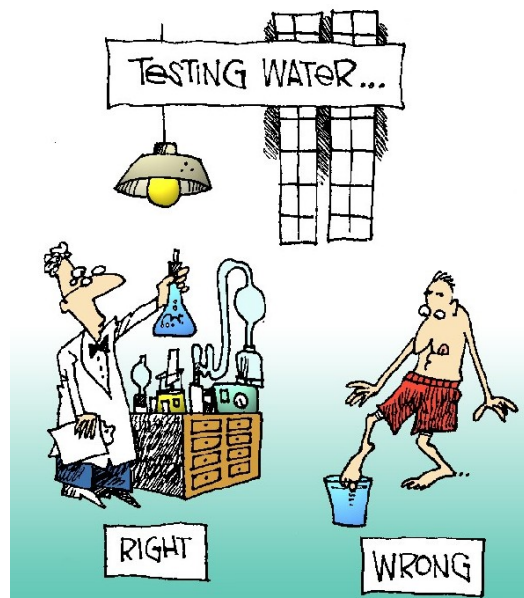
### Water System Facts

Year Established	1980
Total Water Produced, 2002	3.49 Billion Gallons
Peak Day:	20.817 Million Gallons
Average Daily Demand, 2002:	9.69 Million Gallons
Average Daily Demand per Person (gpcd)	140 gpcd
Number of Water Meters	16,719
Ground Storage	Dowling Road Pump Station (8 MG)
Elevated Storage	Park Place (3 MG) Greens Prairie (2 MG)
Number of Hydrants	1,478
Service Area	47.22 square miles
Miles of Water Line	294

### Unregulated Contaminant Monitoring: (No Maximum Contaminant Levels)

Unregulated Contaminant Monitoring helps the EPA determine where certain contaminants occur and whether the EPA needs to regulate those contaminants. This monitoring was done in 2002 to comply with 40 CFR 141.40(e).

Name of Compound	Amount Detected (ppb)
Bromodichloromethane	1.3 - 4.3
Bromoform	4.1 - 11.9
Chloroform	1
Dibromochloromethane	3.1 - 12.1



### Alternate Water Source Information

The City of College Station has interconnects with the City of Bryan and Texas A&M University (TAMU), to provide or obtain water on an emergency basis. College Station, Bryan and TAMU get their water from the Carrizo-Wilcox Aquifer. The table below shows the dates and amounts for which we obtained water from the City of Bryan and TAMU in 2002. To learn more about the City of Bryan's drinking water quality, please call (979) 209-5900. To learn more about TAMU drinking water quality please call (979) 845-4541.

Date	Supplier	Duration	Reason	Amount (Million Gallons)
8/27/02	TAMU	7 hours	Transmission line work	1.241
8/27/02	Bryan	4 hours	Transmission line work	0.498
9/17/02	TAMU	6 hours	Transmission line work	0.979



## Frequently Asked Questions

### What About Bottled Water ?

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. It is important to note that the presence of a contaminant in your drinking water does not necessarily pose a health risk.

In order to ensure that tap water is safe to drink, the EPA and TCEQ prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water.

More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline (1-800-426-4791)**.

### How Do I Schedule a Tour or Presentation?



Water-Wastewater staff are available for presentations about water quality, wastewater treatment, and water conservation. Schedule a presentation today by calling 979-764-6223 or email

[jnations@ci.college-station.tx.us](mailto:jnations@ci.college-station.tx.us).



### What's In The Water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

### About Taste and Odor...

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor or color of drinking water, please contact **College Station Utilities at (979) 764-3660**.

The EPA has established health-based standards that limit the maximum concentration of a contaminant in drinking water. The presence of a contaminant in your drinking water does not necessarily pose a health risk.

Occasionally water may become discolored due to a water line break. However, simply because water is discolored does not mean it is unsafe to drink. If you experience discolored water, please report it to **Utility Dispatch (24 hours) at 764-3638** so that we may address the problem.

**Water Is Life!**

## Protecting Water Quality

### About Cryptosporidium

*Cryptosporidium* (krip'-toe-spor-id'-ee-um) is a protozoan parasite that can live in the intestines of infected humans and animals. There are many sources of *Cryptosporidium*. Examples include foods such as unwashed fruits and vegetables, swimming pools, and recreational waters. *Cryptosporidium* enters surface waters, rivers, lakes, and streams from runoff over land. Once swallowed, the parasite infects the lining of the intestine, causing some people to get a disease called *Cryptosporidiosis*.

Groundwater that is not under the influence of surface water, such as College Station's water, is considered to be protected from the *Cryptosporidium* parasite.

**Crypto  
WHAT?**

### Coliform Testing

College Station Utilities monitors the safety of our drinking water by collecting a minimum of 81 drinking water samples each month. The Brazos County Health Department analyzes the samples for Coliform bacteria.

Coliform bacteria are used as indicators of microbial contamination of drinking water because they are easily detected and found in the digestive tract of warm-blooded animals. Their absence from water is a good indication that the water is bacteriologically safe for human consumption.

In 2002, 4 out of 972 routine samples tested positive for Total Coliform bacteria. All positive sites were immediately re-sampled and showed no Coliform bacteria. College Station did not violate the standard for Coliform bacteria.



College Station Utilities  
Water/Wastewater Divisions  
P.O. Box 9960  
1601 Graham Road  
College Station, TX 77842

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## Water Conservation News

Summer is almost here, and that means it's time to sharpen your water conservation sense! Stage 1 of College Station's Drought Contingency Plan is in effect May 1st to September 30th each year. College Station Utilities requests all of our customers to voluntarily conserve water by following the water conservation tips below. Saving water translates to lower bills for you now (and more money in your pocket), and a reliable, cost-effective water supply for the future.

- \* Limit water lost to evaporation by watering before 9:00 am or after 8:00 pm.
- \* Go with the "low flow" and save over 7,000 gallons of water (and wastewater!) a year by switching to a water-saving showerhead!
- \* Try "Water-Wise" landscaping: Use native and adapted plants, water efficiently, and mulch to conserve water.
- \* Repair leaks quickly! Dripping faucets and toilets can waste up to 2 gallons of water per hour... or over 17,000 gallons a year!
- \* Report suspected water leaks to College Station Utilities Dispatch at 764-3638.

Be "Water Smart" this summer!  
Follow the 5-Day Watering Schedule.  
For your copy, call 764-3660 or visit  
<http://pud.ci.college-station.tx.us/5dayschedule.htm>.

## Backflow Prevention News



When water flows backward through the water supply system, it is called *backsiphonage* or *backflow*. For example, if the pressure in a water main drops while a hose connected to College Station's water system is submerged in polluted or contaminated water, that water (and whatever is in it) could be sucked into *your* drinking water supply! To protect against backflow, follow these tips:

- Never submerge hoses in buckets, pools, tubs, or sinks.
- Always keep the end of the hose clear of contaminants.
- Never use hose-end spray attachments without a backflow prevention device.
- Install backflow prevention devices such as hose-bib vacuum breakers on all threaded faucets in your home.
- Install an approved backflow prevention assembly on your automatic irrigation system.
- Be sure to have the backflow prevention assembly on your lawn irrigation system tested once every 5 years, and after installation or whenever it is moved.